



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P61262PC00		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/NL 02/00552	International filing date (day/month/year) 16.08.2002	Priority date (day/month/year) 16.08.2002	
International Patent Classification (IPC) or both national classification and IPC G01S3/02			
Applicant STICHTING ASTRON et al.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 04.03.2004		Date of completion of this report 25.08.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Teale, A Telephone No. +49 89 2399-8220 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**International application No. **PCT/NL 02/00552****I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-14 as originally filed

Claims, Numbers

1-22 as originally filed

Drawings, Sheets

1-3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 21,22

because:

☒ the said international application, or the said claims Nos. 21,22 relate to the following subject matter which does not require an international preliminary examination (specify):

see separate sheet

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Yes: Claims	1-19
	No: Claims	20
Inventive step (IS)	Yes: Claims	1-19
	No: Claims	20
Industrial applicability (IA)	Yes: Claims	1-20
	No: Claims	

2. Citations and explanations

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Re Item III**(Non-establishment of opinion with regard to novelty, inventive step and industrial applicability.)**

Claim 21 sets out a "computer program product" and claim 22 a "data carrier" representing the computer program product of claim 21. Under the PCT International Preliminary Examination Guidelines (version in force from 9 October 1998), IV 2.4 (f) and Rule 67.1(vi) PCT, such claims need not be examined by the IPEA and the IPEA chooses not to carry out such preliminary examination of claims 21 and 22.

Re Item V**(Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement.)**

1. Reference is made to the following document:

D1: US-B-6 239 7471 (KAMINSKI WALTER JOSEPH) 29 May 2001 (2001-05-29)

2. D1 forms the closest prior art on file, disclosing (column 12, lines 8 to 27) a method of calibrating phase errors (termed "geometric correction factors") in a sensor array comprising:

receiving an output signal of at least two sensor element signals in reaction to an input signal from a signal source (see figure 1, elements 12, 14 and 16), and

estimating a cross-correlation between the output signals of at least two of said sensor elements (column 3, lines 1 to 8).

3. The subject-matter of claims 1 and 17 differs from this prior art in the features set out in lines 9-20 and 25-5 (page 18), respectively, i.e. the features relating to optimising, parameter estimation and the cross-correlation model.

Since these difference features are neither known nor derivable from any document on file and are not matters of usual design, the subject-matter of claims 1-19 complies with Article 33(2,3) PCT regarding novelty and inventive step.

4. The reference in claim 20 to an array signal processing system being calibrated by

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the claimed method is not seen as restricting the technical features of the array signal processing system, since such a system is indistinguishable from a system using the same calibration parameters, but derived by a different method.

Hence claim 20 is regarded as effectively setting out an "array signal processing system", thus lacking novelty, Article 33(2) PCT, in view of figure 1 of D1.

5. As set out above, the IPEA chooses not to examine claims 21 and 22.
6. The subject-matter of claims 1-20 complies with Article 33(4) PCT regarding industrial applicability.